

Section 1. Chemical Product and Manufacturer's Identification

Product Name : DSB High Strength Epoxy - Part B
Supplier/Manufacturer : The D.S. Brown Company
300 East Cherry Street
North Baltimore, Ohio 45872
In Case of Emergency : Chemtrec: 800-424-8200 International 01-703-741-5500

Section 2. Hazards Identification

Classification : Acute Aquatic Toxicity - Category 3
Acute Toxicity Dermal - Category 5
Acute Toxicity Oral - Category 5
Carcinogenicity - Category 2
Chronic Aquatic Toxicity - Category 2
Corrosive to Metals - Category 1
Reproductive Toxicity - Category 1B
Respiratory Sensitizer - (Solid/Liquid) - Category 1
Serious Eye Damage - Category 1
Skin Corrosion - Category 1B
Skin Sensitizer - Category 1B
Specific Target Organ Toxicity - Repeated Exposure - Category 2

Pictograms : 

Signal Word : **Danger**

Hazardous Statements - Physical : H290 - May be corrosive to metals

Hazardous Statements - Health : H313 - May be harmful in contact with skin
H303 - May be harmful if swallowed
H351 - Suspected of causing cancer
H360 - May damage fertility or the unborn child
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H314 - Causes severe skin burns and eye damage
H317 - May cause an allergic skin reaction
H373 - May cause damage to organs through prolonged or repeated exposure

Hazardous Statements - Environmental : H402 - Harmful to aquatic life
H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements - General : P101 - If medical advice is needed, have product container or label at hand
P102 - Keep out of reach of children
P103 - Read label before use

Precautionary Statements - Prevention : P273 - Avoid release to the environment
P201 - Obtain special instruction before use
P202 - Do not handle until all safety precautions have been read and understood
P280 - Wear protective gloves/protective clothing
P234 - Keep only in original packaging
P284 - In case of inadequate ventilation, wear respiratory protection
P260 - Do not breathe dust/fume/gas/mist/vapors/spray

Section 2. Hazards Identification *cont'd.*

Precautionary Statements - Response	:	P264 - Wash thoroughly after handling
	:	P272 - Contaminated work clothing should not be allowed out of the workplace
	:	P312 - Call a POISON CENTER/doctor if you feel unwell.
	:	P308 + P313 - IF exposed or concerned: Get medical advice/attention
	:	P391 - Collect spillage
	:	P390 - Absorb spillage to prevent material damage
	:	P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
	:	P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER/doctor
	:	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to fo. Continue rinsing.
	:	P310 - Immediately call a POISON CENTER or doctor
	:	P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.
	:	P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
	:	P363 - Wash contaminated clothing before reuse
Precautionary Statements - Storage	:	P321 - Specific treatment (see section 4 on this SDS)
	:	P302 + P352 - IF ON SKIN: Wash with plenty of water
	:	P333 + P313 - If skin irritation or a rash occurs: Get medical advice/attention
Precautionary Statements - Disposal	:	P362 + P364 - Take off contaminated clothing. And wash it before reuse
	:	P405 - Store locked up
	:	P406 - Store in a corrosive resistant/...container with a resistant inner liner
	:	P501 - Disposal of contents/container to an approved waste disposal plant

Section 3. Composition/Information on Ingredients

Chemical Name	CAS No.	Weight %
Fatty Acids, Tall-Oil, Reaction products with TETRAETHYLENEPENTAMINE	0068953-36-6	12% - 23%
PARATERTIARYBUTYLPHENOL	0000098-54-4	4% - 7%
TETRAETHYLENEPENTAMINE	0000112-57-2	2% - 4%
2,4,6-TRI(DIMETHYLAMINOMETHYL) PHENOL	0000090-72-2	2% -4%
DIETHYLENE TRIAMINE	0000111-40-0	1.7% - 3%
BENZYL ALCOHOL	0000100-51-6	1.1% - 1.9%
BIS((DIMETHYLAMINO)METHYL)PHENOL	0071074-89-0	0.4% - 0.7%
CARBON BLACK	0001333-86-4	0.3% - 0.5%

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality.

Section 4. First-Aid Measures

Inhalation	:	Remove source of exposure or move person to fresh air and keep comfortable for breathing
	:	If exposed/feel unwell/concerned: Call a POISON CENTER/doctor



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Section 4. First-Aid Measures *cont'd.*

- Skin Contact** : Rinse/wash with lukewarm, gently flowing water and mild soap for 15-20 minutes or until product is removed. If skin irritation occurs or you feel unwell: Get medical advice/attention.
IF exposed or concerned: Get medical advice/attention
- Eye Contact** : Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.
- Ingestion** : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position.
Give 3 or 4 glasses of water to drink. Never give anything by mouth to an unconscious person.

Section 5. Fire-Fighting Measures

- Suitable Extinguishing Media** : Dry chemical, foam, carbon dioxide water spray or fog is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Sand or earth may be used for small fires only
- Unsuitable Extinguishing Media** : If water is used, use very large quantities of cold water
- Specific Hazards in Case of Fire** : Excessive pressure or temperature may cause explosive rupture of containers.
- Fire-Fighting Procedures** : Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid.
Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.
- Special Protective Actions** : Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.
Care should always be exercised in dust/mist areas.

Section 6. Accidental Release Measures

- Emergency Procedure** : ELIMINATE all ignition sources (no smoking flares, sparks or flames in immediate area.)
Do not touch or walk through spilled material.

Section 6. Accidental Release Measures *cont'd.*

Isolate hazard area and keep unnecessary people away. Remove all possible sources of ignition in the surrounding area. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.
If spilled material is cleaned up using regulated solvent, the resulting waste mixture may be regulated.

- Recommended Equipment** : Appropriate dust or face mask to eliminate breathing foam dust particulates
- Personal Precautions** : Avoid breathing vapors. Avoid contact with the skin, eyes or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.
- Environmental Precautions** : Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.
- Methods and Materials for Containment and Cleaning Up** : Soak up material with absorbent and shovel into a chemical waste container. Cover container, but do not seal, and remove from work area. Residues from spill cleanup may continue to be regulated under provisions of RCRA and require storage and disposal as hazardous waste. For major spills, call CHEMTREC (Chemical Transportation Emergency Center) at 800-424-9300.

Section 7. Handling and Storage

- General** : Wash hands after use.
Do not get in eyes, on skin or on clothing.
Do not breathe vapors or mists.
Use good personal hygiene practice.
Eating, drinking and smoking in work areas is prohibited.
Remove contaminated clothing and protective equipment before entering eating areas.

Eyewash stations and showers should be available in areas where the material is used and stored.

Individuals with existing respiratory disease such as chronic bronchitis, emphysema, or asthma should not be exposed.
- Ventilation Requirements** : Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.
- Storage Room Requirements** : Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight and incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty container retain residue and may be dangerous.

Store in tightly sealed containers to protect from atmospheric moisture. Store in a cool dry area. Store liquid in containers above ground and surround by dikes to contain spills or leaks.

Do not cut, drill, grind, weld, or perform similar operations on or near containers.

Section 8. Exposure Controls/Personal Protection

- Eye Protection** : Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.
- Skin Protection** : Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration on contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.
- Respiratory Protection** : In engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910. 134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers.
- In poorly ventilated areas, a cartridge mask NIOSH approved for organic vapors is recommended under the following conditions: emergency situations, when product vapor concentration is greater than 20 ppm for a period longer than 15 min., during repair and cleaning of equipment, during transfer or discharge of the product.
- Appropriate Engineering Controls** : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	OSHA TWA (mg/m ³)	OSHA Tables (Z1,Z2, Z3)	NIOSH TWA (ppm)
CARBON BLACK	3.5	1	-
DIETHYLENE TRIAMINE	-	-	1

Chemical Name	NIOSH TWA (mg/m ³)	NIOSH Carcinogen	ACGIH TWA (ppm)	ACGIH TWA (mg/m ³)
CARBON BLACK	3.5a	1	-	3 (I)
DIETHYLENE TRIAMINE	4	-	1	-

Chemical Name	ACGIH Carcinogen	ACGIH TLV Basis	ACGIH Notations
CARBON BLACK	A3	Bronchitis	A3
DIETHYLENE TRIAMINE	-	URT & eye irr	Skin

(I) - Inhalable fraction, A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans, irr - Irritation, URT - Upper respiratory tract

Section 9. Physical and Chemical Properties

Density	: 13.51 lb/gal
Specific Gravity	: 1.62
VOC Regulatory	: 0.00 lb/gal
VOC Part A & B Combined	: N.A.
Appearance	: Liquid
Odor Threshold	: N.A.
Odor Description	: Amine-like
pH	: N.A.
Water Solubility	: N.A.
Flammability	: N.A.
Flash Point Symbol	: N.A.
Flash Point	: 190° C
Viscosity	: N.A.
Lower Explosion Level	: N.A.
Upper Explosion Level	: N.A.
Vapor Pressure	: N.A.
Vapor Density	: Heavier than air
Freezing Point	: N.A.
Melting Point	: N.A.
Low Boiling Point	: 200° C
High Boiling Point	: N.A.
Auto Ignition Temp	: N.A.
Decomposition Pt	: N.A.
Evaporation Rate	: Slower than ether
Coefficient Water/Oil	: N.A.

Section 10. Stability and Reactivity

Stability	: Material is stable at standard temperature and pressure.
Conditions to Avoid	: Heat, high temperature, open flame, sparks, and moisture. Contact with incompatible materials in a closed system will cause buildup of pressure.
Hazardous Reactions/ Polymerization	: Will not occur
Incompatible Materials	: This product will react with epoxies, isocyanates, and strong oxidizing agents. Some reactions can be violent
Hazardous Decomposition Products	: Combustion products: organic vapors and thermal decomposition fragments

Section 11. Toxicological Information

- Skin Corrosion/Irritation** : Causes severe skin burns and eye damage
- Serious Eye Damage/Irritation** : Any contact should not be left untreated
Causes serious eye damage
0000100-51-6 BENZYL ALCOHOL
Contact with eyes causes local irritation
- Respiratory/Skin Sensitization** : Exposure may cause mucous membrane and respiratory tract irritation, tightness of chest, headache, shortness of breath, and a dry cough. The effects of acute exposure may be delayed in onset up to 12-24 hours. Repeated exposure above current occupational limits may cause an allergic sensitization of the respiratory tract. This is characterized by an asthma-like response upon re-exposure to the chemical. The symptoms may include coughing, wheezing, shortness of breath and chest tightness.

May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction
- Carcinogenicity** : Suspected of causing cancer
- Germ Cell Mutagenicity** : Based on available data, the classification criteria are not met
- Reproductive Toxicity** : May damage fertility or the unborn child
- Specific Target Organ Toxicity**
- Single Exposure** : Based on available data, the classification criteria are not met.
- Repeated Exposure** : Repeated exposure generally aggravates the following medical conditions: Cardiovascular disease and Chronic respiratory disease. May cause damage to organs through prolonged or repeated exposure.
- Aspiration Hazard** : Based on available data, the classification criteria are not met.
- Acute Toxicity** : If ingested: In humans, irritation or chemical burns of the mouth, pharynx, esophagus and stomach can develop following ingestion, and injury may be severe and cause death.

May be harmful in contact with skin
May be harmful if swallowed
- Likely Routes of Exposure** : Inhalation, Ingestion, Skin Contact, Eye Contact

0000100-51-6 BENZYL ALCOHOL

The substance can be absorbed into the body by inhalation of its vapor and by ingestion
- Miscellaneous Health Effects** : 0000100-51-6 BENZYL ALCOHOL

Inhalation of vapor may cause irritation of upper respiratory tract. Prolonged or excessive inhalation may result in headache, nausea, vomiting, and diarrhea. In severe cases, respiratory stimulation followed by respiratory and muscular paralysis, convulsions, narcosis and death may result. Ingestion may produce severe irritation of the gastrointestinal tract, followed by nausea, vomiting, cramps and diarrhea; tissue ulceration may result.

Section 11. Toxicological Information *cont'd.*

Chronic Exposure	: 0001333-86-4 CARBON BLACK <p>CARCINOGENIC EFFECTS: In 1996, the IARC reevaluated Carbon Black as a Group 2B carcinogen. This evaluation is given to carbon black for which there is inadequate human evidence, but sufficient animal evidence.</p> <p>Prolonged inhalation of Carbon black can result in lung disease. Symptoms include coughing, shortness of breath, wheezing and reduced pulmonary function.</p>
Potential Health Effects - Miscellaneous	: 0001333-86-4 CARBON BLACK <p>Is an IARC, NTP or OSHA carcinogen. Has shown carcinogenic activity in laboratory animals at high doses. Significance to man is unknown. The following medical conditions may be aggravated by exposure: asthma, respiratory disease. WARNING: This chemical is known to the State of California to cause cancer.</p> <p>0001333-86-4 CARBON BLACK LC50 (rat): 6750 mg/m³ (4-hour exposure); cited as 27000 mg/m³ (27 mg/L) (1-hour exposure) (3)</p> <p>0000111-40-0 DIETHYLENE TRIAMINE LD50 (oral, rat): 1080 mg/kg body weight (1) LD50 (oral, rat): 1800 mg/kg body weight (2) LD50 (oral, rat): 2330 mg/kg body weight (3)</p> <p>LD50 (dermal, rabbit): 1046 mg/kg (1090 mL/kg) (3) LD50 (dermal, guinea pig): 163 mg/kg (170 mL/kg) (4-day application)</p> <p>0000100-51-6 BENZOL ALCOHOL LC50(Inhalation, rat):>500 mg/m³; Toxic effects: Behavioral - somnolence (general depressed activity) Behavioral - ataxia Lungs, Thorax, or Respiration - respiratory depression; Reference: VCVGK* "Vrednie chemichescie veshstva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Halogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume (issue)/page/year: -,132,1984</p> <p>LD50(Dermal, rabbit): 2000 mg/kg; VCVGK* "Vrednie chemichescie veshstva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Halogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume (issue)/page/year: -,132,1984</p> <p>LD50(Oral, rat): 1230 mg/kg; Toxic effects: Behavioral - somnolence (general depressed activity) Behavioral - excitement Behavioral - coma</p>

Section 12. Ecological Information

Toxicity	: Harmful to aquatic life
Mobility in Soil	: No data available
Other Adverse Effects	: No data available
Bioaccumulative Potential	: 0000100-51-6 BENZOL ALCOHOL No potential for bioaccumulation

Section 12. Ecological Information *cont'd.*

Persistence and Degradability : 0000100-51-6 BENZYL ALCOHOL

Readily biodegradable.

0001333-86-4 CARBON BLACK

Carbon Black's insolubility in water results in it not being biodegradable in any medium or by biota. It is considered persistent in the natural environment.

Results of the PBT and vPvB Assessment : 0000100-51-6 BENZYL ALCOHOL
The substance is not PBT/vPvB

Section 13. Disposal Considerations

Waste Disposal : Under RCRA, it is the responsibility of the user of the product, to determine a the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws.

Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

Section 14. Transport Information

U.S. DOT Information : UN/NA #: 2735
UN Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAIN AMINES) Hazard Class: 8
Packing Group: III
Placard: Corrosive

IMDG Information : UN/NA #: 2735
UN Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAIN AMINES) Hazard Class: 8
Packing Group: III
Placard: Corrosive
Marine Pollutant: YES

IATA Information : UN/NA #: 2735
UN Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAIN AMINES) Hazard Class: 8
Packing Group: III
Placard: Corrosive

Section 15. Regulation Information

Chemical Name	CAS No.	% By Weight	Regulation List
Fatty Acids, Tall-Oil, Reaction Products with TETRAETHYLENEPENTAMINE	0068953-36-6	12% - 23%	DSL, SARA312, TSCA
PARATERTIARYBUTYLPHENOL	0000098-54-4	4% - 7%	DSL, SARA312, TSCA
TETRAETHYLENEPENTAMINE	0000112-57-2	2% - 4%	DSL, SARA312, VOC, TSCA
2,4,6-TRI (DIMETHYLAMINOMETHYL) PHENOL	0000090-72-2	2% - 4%	DSL, SARA312, TSCA
DIETHYLENE TRIAMINE	0000111-40-0	1.7% - 3%	DSL, SARA312, VOC, TSCA
BENZYL ALCOHOL	0000100-51-6	1.1% - 1.9%	DSL, SARA312, VOC, TSCA
BIS((DIMETHYLAMINO)METHYL)PHEN OL	0071074-89-0	0.4% - 0.7%	SARA312
CARBON BLACK	0001333-86-4	0.3% - 0.5%	DSL, SARA312, TSCA, CA_Prop65 - California Proposition 65

Section 16. Other Information

Other Information	: Note: As per GHS, category 1 is the greatest level of hazard within each class.
Glossary	: ACGIH- American Conference of Governmental Industrial Hygienists ANSI- American National Standards Institute CA Prop65- California Proposition 65 Canadian TDG- Canadian Transportation of Dangerous Goods CAS- Chemical Abstract Service Chemtrec- Chemical Transportation Emergency Center (US) CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List EC- Equivalent Concentration EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits EPCRA- Emergency Planning and Community Right-To-Know Act ESL- Effects screening levels HMIS- Hazardous Material Information Service LC- Lethal Concentration LD- Lethal Dose NFPA- National Fire Protection Association OEL- Occupational Exposure Limits OSHA- Occupational Safety and Health Administration, US Department of Labor PEL- Permissible Exposure Limit SARA (Title III)- Superfund Amendments and Reauthorization Act SARA 313- Superfund Amendments and Reauthorization Act, Section 313 SCBA- Self-Contained Breathing Apparatus STEL- Short Term Exposure Limit TCEQ- Texas Commission on Environmental Quality TLV- Threshold Limit Value TSCA- Toxic Substances Control Act Public Law 94-469 TWA- Time Weighted Value US DOT- US Department of Transportation WHMIS- Workplace Hazardous Materials Information System. ACGIH - American Conference of Governmental Industrial Hygienists CAS - Chemical Abstracts Service

Section 16. Other Information

Glossary

: Chemtrec - Chemical Transportation Emergency Center
DSL - Domestic Substances List
ESL - Effects screening levels
GHS - "Globally Harmonized System of Classification and Labelling of Chemicals"
developed by the United Nations
HMIS - Hazardous Material Information Service
IATA - Dangerous Goods Regulations (DGR) for the air transport (IATA)
IMDG - International Maritime Dangerous Goods Code
LC - Lethal Concentration
LD - Lethal Dose; NFPA - National Fire Protection Association
OEL - Occupational Exposure Limits
OSHA- Occupational Safety and Health Administration, US Department of Labor
PEL - Permissible Exposure Limit
SARA 313 - Superfund Amendments and Reauthorization Act, Section 313
SCBA - Self Contained Breathing Apparatus
ppm - parts per million
STEL - Short-term exposure limit
TLV - Threshold Limit Value
TSCA - Toxic Substances Control Act Public Law 94-469
TWA - Time-weighted average; US DOT- US Department of Transportation.

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

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